

Claims

- 1        1.        A structural framing member comprising:
- 2                        a first and a second shell member each being elongated so as to
- 3                        have a length dimension which is greater than a width dimension, each
- 4                        shell having an interior surface and including one substantially open
- 5                        side extending along said length dimension, each shell being configured
- 6                        so that said first shell member is securable to said second shell member
- 7                        so that said substantially open sides of said first and second shell
- 8                        members are at least partially contiguous and said first and second shell
- 9                        members cooperate to define an interior volume;
- 10                      at least one reinforcing member positioned within said interior
- 11                      volume defined by said first and second shell member; and
- 12                      a filler material disposed within said interior volume to secure
- 13                      said reinforcing member within said interior volume.
- 1        2.        The structural framing member of claim 1, wherein a protective
- 2                      material is applied on the interior surface of at least one of said shells.
- 1        3.        The structural framing member of claim 1, wherein said first and
- 2                      second shell are generally u-shaped.
- 1        4.        The structural framing member of claim 1, wherein said filler material
- 2                      is concrete.

1 5. The structural framing member of claim 1, wherein said first and  
2 second shells are generally I-shaped.

1 6. The structural framing member of claim 1, wherein a base of said first  
2 shell is wider than a base of said second shell.

1 7. The structural framing member of claim 2, wherein said protective  
2 material is a fire-resistant material.

1 8. The structural framing member of claim 7, wherein said fire-resistant  
2 material is mineral wool.

1 9. The structural framing member of claim 7, wherein said fire-resistant  
2 material is fiberglass.

1 10. The structural framing member of claim 2, wherein said fire protective  
2 material is a heat sink material.

1 11. The structural framing member of claim 10, wherein said heat sink  
2 material is gypsum board.

1 12. The structural framing member of claim 10, wherein said heat sink  
2 material is a cement plaster.

1 13. The structural framing member of claim 10, wherein said heat sink  
2 material is a concrete.

1 14. The structural framing member of claim 10, wherein said heat sink  
2 material is sand.

1 15. The structural framing member of claim 10, wherein said heat sink  
2 material is gravel.

1 16. The structural framing member of claim 2, wherein said protective  
2 material is a thermal insulation material.

1 17. A method for manufacturing a structural frame comprising:  
2 providing a first and a second shell member each being  
3 elongated so as to have a length dimension which is greater than a  
4 width dimension, each shell member including one substantially open  
5 side extending along said length dimension and defining an interior  
6 channel;  
7 positioning at least one reinforcing member within each of said  
8 interior channels of said first and second shell member;

9                   securing said first shell member to said second shell member at  
10               least partially along said substantially open side so that the interior  
11               channels of the first and second shell members cooperate to define an  
12               interior volume;  
13               filling said interior volume defined by said first and second shell  
14               member with a filler material so that said reinforcing members are  
15               secured within said interior volume.

1   18.   The method of claim 16, comprising the further step of applying a  
2   protective material to said interior channel of at least one of said first and  
3   second shells.

19. A structural framing member comprising:

a first and a second shell member each being elongated so as to have a length dimension which is greater than a width dimension, each shell having an interior surface and including one substantially open side extending along said length dimension, each shell being configured so that said first shell member is securable to said second shell member so that said substantially open sides of said first and second shell members are at least partially contiguous and said first and second shell members cooperate to define an interior volume;

at least one reinforcing member affixed to the interior surface of said first and second shell member;

a protective material applied on said interior surface of each of said shells; and

a filler material disposed within said interior volume to secure said reinforcing member within said interior volume.